

Claims

1. A method of delivering one of a plurality of identical products associated with a seller to a purchaser, said method comprising:

- (a) transporting the identical products in a delivery circuit that includes a plurality of delivery nodes by transporting the identical products between delivery nodes at a first speed;
- (b) determining if one of said identical products has been ordered by one of the purchasers;
- (c) if (b) is true then determining which of said plurality of delivery nodes is closest to said purchaser;
- (d) providing the closest one of said identical products to the delivery node identified in (c) along the delivery circuit and then transporting said closest one of said identical products from the delivery node identified in (c) to said purchaser.

2. The method of claim 1, wherein (a) further comprises associating each of said identical products with a unique tracking number and wherein (d) further comprises determining the destination address of said purchaser and pushing said unique tracking number and destination address to the delivery node identified in (c) prior to the physical arrival of the one of said identical products at the delivery node identified in (c).

3. The method of claim 1, wherein (a) further comprises associating each of said identical products with a destination node and wherein step (c) further comprises recording said delivery node identified in (c) as the destination node for said closest one of said identical products.

4. The method of claim 1, wherein (a) further comprises associating each of said identical products with a destination node and a default destination

node, wherein said destination node is the closest delivery node to the current position of the product and the default destination node is a delivery node adjacent to the destination node.

5. The method of claim 4, wherein when the product reaches the destination node, (a) further comprises changing the destination node so that it corresponds to the previous default destination node and to change the default destination node by choosing from the set of delivery nodes adjacent to the destination node.

6. The method of claim 1, wherein (d) further comprises transporting the closest one of said identical products through a series of delivery nodes to the delivery node identified in (c).

7. The method of claim 1, wherein (d) further comprises storing the closest one of said identical products at the delivery node identified in (c).

8. The method of claim 1, wherein the transportation of the product from said identified delivery node to the purchaser is conducted at a second speed wherein said first speed is less than said second speed.

9. The method of claim 1, wherein the products are transported within a sub-set of said delivery nodes to service a particular section of said delivery circuit.

10. The method of claim 1, further comprising the delivery of the products from the seller to the delivery circuit.

11. The method of claim 10, further comprising:

- (i) estimating demand for the products at each delivery node associated with said delivery circuit;
- (ii) providing a sufficient quantity of the products from the seller to said delivery circuit for prospective delivery.

12. The method of claim 1, further comprising:

- (I) determining whether there is a cluster of products within said delivery circuit;
- (II) if (I) is true, then rebalancing the flow of said products within said delivery circuit by re-directing at least some of said products.

13. A delivery system for delivering a plurality of identical products associated with a seller to a plurality of purchasers, said system comprising:

- (a) a first delivery module for transporting the identical products in a delivery circuit that includes a plurality of delivery nodes at a first speed;
- (b) a distribution module associated with said first delivery module for determining if one of the products has been ordered by said one of the purchasers, and if so then determining which of said plurality of delivery nodes is closest to said one of the purchasers; and
- (c) a second delivery module associated with said distribution module for providing the closest of said identical products to said identified delivery node through said delivery circuit and then from said identified delivery node to said one of the purchasers.

14. The system of claim 13, wherein said first delivery module is further adapted to associate each of said identical products with a unique tracking

number and wherein said second delivery module is further adapted to determine the destination address of said purchaser and to push said unique tracking number and destination address to the identified delivery node prior to the physical arrival of the one of said identical products at the identified delivery node.

15. The system of claim 13, wherein said first delivery module is further adapted to associate each of said identical products with a unique tracking number and a destination node and wherein said second delivery module is further adapted to record said identified delivery node as the destination node for said closest one of said identical products.

16. The system of claim 13, wherein said first delivery module is further adapted to associate each of said identical products with a destination node and a default destination node, wherein said destination node is the closest delivery node to the current position of the product and the default destination node is a delivery node adjacent to the destination node.

17. The system of claim 13, wherein when the product reaches the destination node, the first delivery module is further adapted to change the destination node so that it corresponds to the previous default destination node and to change the default destination node by choosing from the set of delivery nodes adjacent to the destination node.

18. The system of claim 13, wherein said second delivery module is further adapted to transport the closest one of said identical products through a series of delivery nodes to the identified delivery node.

19. The system of claim 13, wherein said second delivery module is further adapted to store the closest one of said identical products at the identified delivery node.

20. The system of claim 13, wherein said second delivery module is further adapted to transport the product from said identified delivery node to the purchaser at a second speed wherein said first speed is less than said second speed.

21. The system of claim 13, wherein said first delivery module transports the products within a sub-set of said delivery nodes to service a particular section of said delivery circuit.

22. The system of claim 13, wherein said distribution module is further adapted to:

- (i) estimate demand for the products at each delivery node associated with said delivery circuit;
- (ii) provide a sufficient quantity of the products from the seller to said delivery circuit for prospective delivery.

23. The system of claim 13, wherein said distribution module is further adapted to:

- (i) determine whether there is a cluster of products within said delivery circuit;
- (ii) if (i) is true, then rebalancing the flow of said products within said delivery circuit by re-directing at least some of said products.